AF/1763

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| Application Number | 08/893,917 |
| Filing Date | July 11, 1997 |
| First Named Inventor | Littau, Karl |
| Art Unit | 1763 |
| Examiner Name | Rudy Zervigon |
| Total Number of Pages in This Submission | |
| Attorney Docket Number | AM2119/T21300 |

**ENCLOSURES** *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
  - ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s)
- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☒ Appeal Communication to Group (**Appeal Notice, Brief, Reply Brief**)
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Other Enclosure(s) *(please identify below)*:

  Two Return Postcards

**Remarks** The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

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| Firm or Individual | Townsend and Townsend and Crew LLP<br>Chun-Pok Leung Reg. No. 41,405 |
| Signature | |
| Date | 6-17-03 |

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PATENT
Attorney Docket No.: AM2119/T21300
TTC No.: 16301M-021300



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of:

Karl Littau et al.

Application No.: 08/893,917

Filed: July 11, 1997

For: REMOTE PLASMA CLEANING SOURCE HAVING REDUCED REACTIVITY WITH A SUBSTRATE PROCESSING CHAMBER

Examiner: Rudy Zervigon

Art Unit: 1763

APPELLANT'S SUPPLEMENTAL REPLY BRIEF TO SUPPLEMENTAL EXAMINER'S ANSWER UNDER 37 CFR § 1.193 (b)(1)



Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Supplemental Examiner's Answer mailed on April 17, 2003 on remand from the Decision of the Board of Patent Appeals and Interferences on January 30, 2003, Applicants respectfully request the Board of Patent Appeals and Interferences to consider the following remarks. This Supplemental Reply is submitted in triplicate, and is believed to be proper pursuant to 37 CFR § 1.193(b)(1).

In the Decision, the Board reversed the rejection of claims 1-4, 6, and 21 under 35 U.S.C. § 102(b) as anticipated by Kawamura; and remanded the application to the Examiner with respect to: (1) the rejection of claims 8, 9, and 11-15 under 35 U.S.C. § 102(b) as anticipated by Kawamura; (2) the rejection of claims 8-15 under 35 U.S.C. § 102(b) as being

anticipated by Moslehi; and (3) the rejection of claims 16-20 under 35 U.S.C. § 103(a) as being unpatentable over Kawamura or Moslehi in view of Stevens.

In the Supplemental Examiner's Answer, the Examiner only addresses the rejection of claims 8-15 under 35 U.S.C. § 102(b) as being anticipated by Moslehi, and the rejection of claims 16-20 under 35 U.S.C. § 103(a) as being unpatentable over Moslehi in view of Stevens. Accordingly, this Supplemental Reply will not address any of the rejections based on Kawamura.

In remanding the application with respect to the rejection of claims 16-20 under 35 U.S.C. § 103(a) as being unpatentable over Moslehi in view of Stevens, the Board notes that the Examiner "does not provide reasons of why one skilled in the art would have incorporated the parts of Stevens' apparatus into the apparatus of Moslehi, nor how one skilled in the art would do so." The Examiner simply concludes that the reason for incorporation of the parts is "a common practice in the art." The Board states that "the examiner has overlooked the basic principle that there must have been something present in the teachings to suggest to one skilled in the art that the claimed invention would have been obvious." The Board further notes that "the examiner has overlooked the basic principle that obviousness under § 103 is a legal conclusion based upon facts revealing the scope and content of prior art, the differences between prior art and the claims at issue, the level of ordinary skill in the art, and objective evidence of nonobviousness." Therefore, the Board remanded the application with respect to the rejection of claims 16-20 "for a proper analysis in this regard." Decision at page 9.

In the Supplemental Examiner's Answer, the Examiner does not offer the proper analysis required by the Board, but merely states: "It is the examiner's position that a person of ordinary skill in the art at the time the invention was made would have found it obvious to modify the Moslehi microwave source by introducing Stevens et al.'s microwave arrester. The Stevens et al. microwave arrester is a common practice in the art limiting the extent of microwave radiation permeation to the volume of gas intended for discharge as taught by Stevens (column 5, lines 24-38; column 6, lines 44-57) in order to provide for efficient power delivery and uniformity to the plasma volume (column 9, lines 9-12; column 3, lines 19-35)." Essentially, the Examiner maintains the assertion that it is a common practice in the art, with

no explanation as to why one skilled in the art would incorporate the parts of Stevens' apparatus into the apparatus of Moslehi, or how it would do so.

In addition, Stevens et al. does not disclose the microwave arrestors as claimed. Stevens et al. discloses a dummy load 46 connected to a magic-T 38, as shown in Fig. 2, "so that any reflected power returning back from the first and second arms will return into the dummy load 46 or be reflected back to the microwave source 30" (col. 5, lines 32-36). In contrast, independent claim 16 recites an applicator having an input aperture and an output aperture, each of which is equipped with microwave arrestors. As discussed in the specification at page 22, lines 2-7, the microwave arrestors are provided at the input aperture and the output aperture to prevent egression of the microwave plasma from volume 406 of the plasma applicator 402, and are preferably comprised of grids, or metal plates having a plurality of throughways. There is no teaching as to how the dummy load 46 in Stevens et al. can be incorporated into the apparatus of Moslehi to provide microwave arrestors at input and output apertures, as recited in claim 16.

For at least the foregoing reasons, Applicants respectfully submit that claim 16 and claims 17-20 depending therefrom are patentable, and respectfully request that the rejection of these claims be reversed.

Respectfully submitted,

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